

9 storing a code word and number of cyclical shifts made that produced a highest
10 amount of correlation in the computing step.

1 46. The method of Claim 45, wherein said number of cyclical shifts made indicate a
2 frame timing for said identifying code.

1 47. The method of Claim 45, further comprising the step of outputting an identity of said
2 stored code word. --

REMARKS

Favorable reconsideration of the above-identified application, as presently amended, is respectfully requested.

Claims 21-46 are pending in this application.

Claims 33-46 are new claims.

Regarding the § 102 Rejection:

Claims 21-23 and 25-32 were rejected under 35 U.S.C. § 102(b) as being anticipated by Teidemann Jr. et al (U.S. Patent No. 5,509,035).

MPEP § 2131 provides: the claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. Verdegall Bros. v. Union Oil Company of California, 814 F2nd 628, 631, 2 USPQ2nd 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as

contained in the ...claim.” Richardson v. Suzuki Motor Company, 868 F2nd 1226, 1236, 9 USPQ2nd 1913, 1920 (Fed Cir. 1989). The elements must be arranged as required by the claim.

Applicant respectfully points out that Teidemann Jr. et al. at the prescribed col. 7, lines 26-48 discusses a transmission from a base station to a mobile station while the system is an advanced mobile phone service (AMPS) mode. The connection from the base station to the mobile station during an active call is on a forward voice channel (FVC). The analog voice signals on the FVC may be interrupted by the forward voice channel data stream. In the forward voice channel data stream, each word is repeated eleven times. Each transmission of the word is proceeded by overhead bits including a dotted pattern and a word sync pattern. The dotted pattern is used for acquisition of bit synchronization and the word sync pattern is used for word synchronization. Note that synchronization is attained on a message by message basis and that the synchronization required is not analogous to the time alignment required for digital mode operation.

Applicant respectfully points out that the portion of the cited art prescribed by the Examiner discusses a transmission from a base station to a mobile station. Furthermore, it is done in analog mode. Finally, the cited reference does not teach a time frame indication for cell searching, instead it states that the FVC data stream is used to communicate handoff messages and other messages to the mobile station.

The Examiner indicated a secondary synchronization information is prescribed and taught in the cited art at col. 12, line 58 to col. 13, line 12. Applicant points out that this portion of the cited art discusses switching from an analog AMPS system to a digital system. This portion of the cited art further discusses a signal being sent from a base station to a mobile station and provides system configuration information. Furthermore, this portion of the cited art specification discusses the sending of a secondary code called a long code. Finally, the Examiner indicated that col. 15, lines 34-40 (which is an element of Teidemann Jr. et al claim 6)

teaches a modulation by an appropriate modulation code, but applicant respectfully submits that in reality the claim portion discusses a timing adjustment circuit which is for synchronizing timing of a digital modulation sequence.

Indeed, the cited art does not teach transmission, by a mobile station, in each time slot of a frame of a primary synchronization code and a secondary synchronization code. The cited art does not discuss anything related to the secondary synchronization code comprising $\log 2$ (of the number of secondary synchronization code) bits. " $\log 2 (N_{\text{ssc}})$."

Furthermore, the cited art does not teach modulating the secondary synchronization code by one of the N_{mod} valid sequences. Furthermore there is no discussion of transmitting, by a mobile station, in each frame, a sequence of sixteen secondary synchronization codes, wherein the second synchronization codes comprise $\log 2 (N_{\text{ssc_seq}})$ bits of information.

As such, contrary to the Examiner's statement that all elements are disclosed in the Teidemann Jr. et al. reference, Applicant respectfully submits that many elements are not disclosed. Applicant therefore respectfully submits that the § 102 rejection is unsupported by the cited art and should be withdrawn.

Applicant further submits that the Teidemann Jr. et al. reference is not enabling of the claimed invention. Even if a reference contained all of the elements or limitations found in a claim, it is not a proper reference under § 102 if that reference is not enabling. See MPEP § 2121.01. Applicant respectfully submits that contrary to the Examiner's statement that the Teidemann reference anticipates claims 21-23 and 25-32, the Teidemann reference does not contain an enabling disclosure, so that the rejection is unsupported by the art and should be withdrawn. The Teidemann reference and in particular the portions of the reference cited by the Examiner do not come together to teach the claimed invention. Col. 7, lines 26-48 discuss a transmission from a base station to a mobile station wherein the system is an analog system being the AMPS system. The connection operates over a forward voice channel and may send

digital data in the prescribed way such that each word sent is repeated eleven times and each transmission of the word is preceded by overhead bits. The overhead bits include a dotted pattern and a word sync pattern. The dotted pattern is used for acquisition of bits synchronization and the word sync pattern is used for word synchronization.

The next cited portion of the specification col. 12, line 58-col. 13, line 12 discusses a switching of a communication system from an analog system to a digital system wherein a base station is sending a signal to a mobile station. The mobile station is receiving system configuration and parameter information. The base station must also provide to the mobile station a secondary PN code state. The secondary code is called a long code since the PN code sequence length is much longer than the PN code sequence used for acquisition. Finally, the Examiner cited col. 15, lines 34-40 which is an element portion of claim 6. This element is a timing adjustment circuit which helps in the synchronization of timing of a dual modulation sequence used in the mobile station. Applicant respectfully points out that the combination of these elements do not equal the presently claimed invention and are not an enabling disclosure such that one of ordinary skill in the art could have combined the information of the Teidemann Jr. et al art to create the invention claimed. Applicant respectfully submits that the Examiner is stretching the cited art beyond recognition by combining the prescribed elements to invalidate the cited claims. Applicant respectfully submits that the § 102 rejection should be withdrawn.

Regarding the § 103 Rejections

Claim 24 was rejected under 35 U.S.C. § 103(a) as being rendered obvious over Teidemann Jr. et al. (U.S. Patent No. 5,509,035) and further in view of Bruekheimer (U.S. Patent No. 5,367,544).

Applicant respectfully points out that § 706.02(j) of the MPEP indicates that there are three necessary elements to establish a *prima facie* case of obviousness as adopted from *In Re Vaeck*. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. *In Re Vaeck*, 947 F2nd 488. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and their reasonable expectation of success must both be found in the prior art and not based on the Applicant's disclosure. *Id.*

With respect to claim 24, this claim is dependent upon independent claim 21. As stated above in the § 102 portion of this amendment, all the elements are not taught or suggested by the Teidemann Jr. et al. reference. Bruekheimer does not remedy the inadequacy of the Teidemann Jr. et al. reference. As such, the cited references do not teach or suggest all the claim limitations. Applicant therefore respectfully submits that a *prima facie* case of obviousness has not been established and therefore requests that this § 103 rejection be withdrawn.

Regarding Amendments to claims 27 and 28

Applicant has amended claims 27 and 28 to cover subject matter that is supported by the understanding that although preferred embodiments of the invention is illustrated in the present detailed description and drawing, it is understood that the invention is not limited to the embodiment disclosed, but is capable of numerous rearrangements, modifications and

substitutions without departing from the inventive concepts of the invention. Applicant respectfully submits that the language "about 16 secondary synchronization codes" means from at least 14 to 18 synchronization codes. Furthermore, applicant submits that the broadening of the claims by amendment is also supported by the deficiencies of the uncovered cited art.

Applicant further submits that no additional searching by the Examiner is required due to the changes made to claims 27 and 28.


Regarding the New Claims:

New claims 33 through 47 have been added to claim additional novel aspects of the invention that has not been taught, anticipated or obviated in any uncovered art to date.

In view of the foregoing, Applicant respectfully requests the thorough reconsideration of this application and earnestly solicits an early notice of allowance.

Respectfully submitted,

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EXHIBIT "A" - CLAIMS MARKED TO SHOW CHANGES

1 27. (Amended) A method for including Frame Timing Indication for cell searching by
2 a mobile station, said method comprising:
3 transmitting, by a mobile station, in each frame, a sequence of about 16 secondary
4 synchronization codes, said secondary synchronization codes comprising $\text{Log}_2(N_{\text{ssc_seq}})$ bits
5 of information to be used to obtain a long code indication; and
6 modulating said secondary synchronization code by one of N_{mod} valid
7 sequences.

1 28. (Amended) The method of claim 27, wherein said sequence of about 16
2 secondary synchronization codes repeats in each frame.